

What is claimed is:

1. A light source driving circuit comprising:

a power supply section;

a light source section;

5 a charging section for storing an electric charge provided from said power supply section;

a switching section for connecting said charging section to said power supply section or to said light source section; and

10 a control section for controlling said switching section so as to connect said charging section to said power supply section, thereby charging said charging section, and so as to disconnect said charging section from said power supply section and connect said  
15 charging section to said light source section, thereby causing said light source section to emit light.

2. The light source driving circuit according to claim 1, wherein a non-emitting period, which includes a period during which said charging section is connected to  
20 said power supply section for charging, is set longer than an emitting period during which said light source section is caused to emit light.

3. The light source driving circuit according to claim 1, wherein said switching section includes a first  
25 switch and a second switch, and wherein

said power supply section is connected to said charging section via said first switch, and said light source section is connected to said charging section via said second switch.

30 4. The light source driving circuit according to claim 3, wherein said first switch and said second switch each have a control terminal, and wherein

said first switch and said second switch are controlled so as to conduct cyclically and in an  
35 alternating drive by a control signal that said control section applies to said each control terminal.

5. The light source driving circuit according to

claim 4, wherein said power supply section includes a constant-current circuit, and wherein

said power supply section charges said charging section via said constant-current circuit.

5           6. The light source driving circuit according to claim 5, wherein said charging section includes a driving capacitor.

10           7. The light source driving circuit according to claim 6, wherein said light source section includes a light-emitting diode.

15           8. The light source driving circuit according to claim 1, wherein said light source section includes a first light source for emitting first color light, a second light source for emitting second color light, and a third light source for emitting third color light.

          9. The light source driving circuit according to claim 8, wherein said switching section includes a first switch, a second switch, a third switch, and a fourth switch, and wherein

20                   said power supply section is connected to said charging section via said first switch, said first light source is connected to said charging section via said second switch, said second light source is connected to said charging section via said third switch, and said  
25           third light source is connected to said charging section via said fourth switch.

30           10. The light source driving circuit according to claim 9, wherein said first switch, said second switch, said third switch, and said fourth switch each have a control terminal, and wherein

35                   said first switch, said second switch, said third switch, and said fourth switch are controlled so as to conduct cyclically and in an alternating drive by a control signal that said control section applies to said each control terminal.

          11. The light source driving circuit according to claim 10, wherein said power supply section includes a

constant-current circuit, and wherein

said power supply section charges said charging section via said constant-current circuit.

12. The light source driving circuit according to claim 1, wherein said light source section includes a first light source for emitting first color light, a second light source for emitting second color light, and a third light source for emitting third color light, and

said charging section includes a first driving capacitor corresponding to said first light source, a second driving capacitor corresponding to said second light source, and a third driving capacitor corresponding to said third light source.

13. The light source driving circuit according to claim 12, wherein said switching section includes a first switch, a second switch, a third switch, a fourth switch, a fifth switch, and a sixth switch, and wherein

said power supply is connected to said first driving capacitor via said first switch, said power supply is connected to said second driving capacitor via said second switch, said power supply is connected to said third driving capacitor via said third switch, said first light source is connected to said first driving capacitor via said fourth switch, said second light source is connected to said second driving capacitor via said fifth switch, and said third light source is connected to said third driving capacitor via said sixth switch.

14. The light source driving circuit according to claim 13, wherein said first switch, said second switch, said third switch, said fourth switch, said fifth switch, and said sixth switch each have a control terminal, and wherein

said first switch, said second switch, said third switch, said fourth switch, said fifth switch, and said sixth switch are controlled so as to conduct cyclically and in an alternating drive by a control

signal that said control section applies to said each control terminal.

- 15        15. The light source driving circuit according to claim 14, wherein said power supply section includes a constant-current circuit, and wherein

              said power supply section charges said first driving capacitor, said second driving capacitor, and said third driving capacitor via said constant-current circuit.

- 10        16. A lighting apparatus which uses a light source driving circuit according to claim 8.

              17. A display apparatus which uses a light source driving circuit according to claim 8.

- 15        18. A field sequential color liquid crystal display apparatus which uses a light source driving circuit according to claim 8.

              19. An information appliance which uses a light source driving circuit according to claim 8.